



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant: Bruce K. Zeller
Serial No.: 10/823,113
Filing Date: April 13, 2004
Title: METHOD AND APPARATUS FOR SEPARATING EXCAVATED MATERIAL
Examiner: Joseph C. Rodriguez
Art Unit: 3653

TO: Mail Stop APPEAL BRIEF-PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**APPELLANT'S SUBSTITUTE BRIEF
PURSUANT TO 37 C.F.R. § 41.37**

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(Submitted in Triplicate)

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PURSUANT TO 37 C.F.R. § 41.37**

Dear Commissioner:

Appellant appeals the decision of the Examiner finally rejecting all of the claims pending in the present application, namely Claims 22-27. A Notice of Appeal was filed by Appellant on September 18, 2006. Appellant is filing this Appeal Brief on March 19, 2007, in that March 18, 2007 falls on a Sunday, along with a four month extension request. **This appeal is being submitted in triplicate.**

I. REAL PARTY IN INTEREST

Bruce K. Zeller is the sole inventor and owns 100% interest in the instant application. The application has not been assigned to any entity.

II. RELATED APPEALS AND INTERFERENCES

No other appeals or interferences are currently known that will directly affect, be directly affected by, or have a bearing on the decision to be rendered by the Board of Patent Appeals and Interferences in the present Appeal.

III. STATUS OF CLAIMS

Claims 1-8 have been cancelled.

Claims 9-21 have been withdrawn.

Claims 22-27 are pending in the application.

Claims 25-27 stand rejected under the judicially created doctrine of obviousness-type double patenting and are appealed herein.

Claims 22, 24-25 and 27 stand rejected under 35 U.S.C. § 102(e) and are appealed herein.

Claims 22 and 25 stand rejected under 35 U.S.C. § 102(b) and are appealed herein.

Claims 23 and 26 stand rejected under 35 U.S.C. § 103(a) and are appealed herein.

IV. STATUS OF AMENDMENTS

No amendments were filed after the Examiner's Office Action issued on June 16, 2006. Accordingly, there are no outstanding amendments which have not already been acted upon by the Examiner.

V. SUMMARY OF CLAIMED SUBJECT MATTER

This invention discloses a separating method and apparatus that enable the efficient and easy removal of a screen assembly, or interchangeable screen assemblies, that are utilized with the apparatus for separating materials from one another. (Specification, paragraph 0007) The

separating apparatus for classifying and recycling material includes a frame 10 having a slanted grate 12 with two opposite sides 14 and two opposite ends 16 and a removable screen 80 (See FIG. 3) positioned on the top surface of the frame. Frame 10 also includes a base member 18 having a front plate 20 and opposite side plates 22, a pair of back legs 24 separated by a horizontal support bar 25, and opposite side support members 26. (Specification, paragraph 0023)

The slanted grate 12 forms less than a ninety degree angle relative to a ground surface on which the frame 10 is placed. (Specification, paragraph 0008) The slanted grate 12 includes a plurality of vertical bars 13 located between opposite ends 16 of slanted grate 12 which are parallel with opposite sides 14 of slanted grate 12. A minimum number of support beams 15 are preferably positioned between and perpendicular to opposite sides 14 of slanted grate 12. (Specification, paragraph 0023) One or more flanges 27 extend from a bottom side of the slanted grate 12 to enable transport and movement of the entire frame 10. In order to transport and move frame 10, a loader/backhoe bucket engages flanges 27 by contacting the bottom side of slanted grate 12 so that flanges 27 reside within the bucket and adjacent to a front edge of the bucket. This engagement temporarily secures the frame 10 to the bucket when frame 10 is lifted from the ground and moved with the loader/backhoe bucket. (Specification, paragraph 0024)

Back legs 24 of base member 18 are secured opposite one another on the top ends of the opposite side plates 22 that are opposite the front plate 20 of the base member 18. The slanted grate is positioned and secured so that its opposite ends rest on the horizontal support bar 25 and the front plate 20 of the base member 18, respectively. Opposite side support members 26 have first ends 28 and second ends 30 and are secured so that first ends 28 meet the attachment point of the back legs 24 and opposite side plates 22 and second ends 30 meet opposite sides 14, respectively, of slanted grate 12 at a midpoint 32 along the length of the opposite sides 14. (Specification, paragraph 0026 and Fig. 1)

In addition, the all of the claims pending on appeal are outlined below along with specific references to the specification of the patent application. Additional support may be present in the specification for various elements.

22. A frame for separating excavated material (*pg. 7, paragraph 0023, first sentence and Fig. 1*) comprising:

a base having a front wall and two horizontal side bars extending backward from opposite sides of a bottom of said front wall (*pg. 7, paragraph 0023, second sentence and Fig. 1*);

at least one vertical bar member extending vertically upward from a top of each of said horizontal side bars at an end of said horizontal side bars opposite said front wall (*pg. 7, paragraph 0023, second sentence and Fig. 1*); and

a grate rigidly secured to, and extending from, a top of said vertical bar members to a top of said front wall such that said grate forms less than a ninety degree angle relative to a ground surface (*pg. 8, paragraph 0025, second and third sentences and Fig. 1*).

23. The frame of claim 22 further comprising at least one support bar extending from a top of each of said horizontal side bars to a mid-length of said grate on opposite sides of said grate (*pg. 8, paragraph 0025, fourth sentence and Fig. 1*).

24. The frame of claim 22 further comprising at least one flange extending downward from a bottom of said grate for facilitating engagement with a bucket of a loader/backhoe (*pg. 7, paragraph 0024, first sentence and Fig. 1*).

25. A frame for separating excavated material (*pg. 7, paragraph 0023, first sentence and Fig. 1*) comprising:

a base having a front wall and two side walls (*pg. 7, paragraph 0023, second sentence and Fig. 1*);

at least one bar member extending vertically upward from each of said side walls (*pg. 7, paragraph 0023, second sentence and Fig. 1*); and

a grate rigidly secured to, and extending from, a top of said bar members to a top of said front wall such that said grate forms less than a ninety degree angle relative to a ground surface (*pg. 8, paragraph 0025, second and third sentences and Fig. 1*).

26. The frame of claim 26 further comprising at least one support bar extending from a top of each side wall to a mid-length of said grate on opposite sides of said grate (*pg. 8, paragraph 0025, fourth sentence and Fig. 1*) .

27. The frame of claim 26 further comprising at least one flange extending downward from a bottom of said grate for facilitating engagement with a bucket of a loader/backhoe (*pg. 7, paragraph 0024, first sentence and Fig. 1*) .

VI. GROUND S OF REJECTION TO BE REVIEWED ON APPEAL

Claims 25-27 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 6,863,182.

Claims 22, 24-25 and 27 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Nierop, U.S. Patent Publication No. 2004/0020830.

Claims 22 and 25 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Bane, U.S. Patent No. 359,659.

Claims 23 and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nierop in view of Wall, U.S. Patent No. 1,005,907.

VII. ARGUMENT

The Examiner rejected all of the pending claims as being unpatentable under 35 U.S.C. §102 and 35 U.S.C. §103(a).

To sustain the rejections set out under 35 U.S.C. §102, the Examiner must establish that the references relied upon disclose each and every element of Appellant's claims. The Examiner has not established that the references relied upon under 35 U.S.C. §102 constitute prior art that discloses each and every element of Appellant's claims.

To sustain the rejections set out under 35 U.S.C. §103(a), the Examiner must establish a *prima facie* case of obviousness. Furthermore, the Examiner must establish a *prima facie* case of obviousness by a preponderance of the evidence. The Examiner has not established a *prima facie* case of obviousness because, *inter alia*, (i) the prior art references, taken together, do not teach or suggest all of the elements of Appellant's claims; (ii) there is no suggestion in the prior art to combine or modify all of the references to meet Appellant's claims; and (iii) a combination of the prior art references does not result in Appellant's claims. Because the Examiner has not established obviousness by a preponderance of the evidence, Claims 22-27 are patentable over the above cited references. Appellant thus respectfully requests that the rejection of these claims under 35 U.S.C. § 103(a) be withdrawn.

A. Appellant Previously Submitted a Terminal Disclaimer to Overcome the Examiner's Obviousness-Type Double Patenting Rejection

Claims 25-27 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 6,863,182. In response to the Examiner's obviousness-type double patenting rejection, Applicant filed a terminal disclaimer in compliance with 37 C.F.R. §1.321(c) on September 18, 2006 to overcome the rejection.

B. The Examiner Has Not Established That the References Relied Upon Under 35 U.S.C. §102 Constitute Prior Art That Discloses Each and Every Element of Appellant's Claims

Claims 22, 24-25, and 27 stand rejected under 35 U.S.C. §102(e) as being anticipated by Nierop, U.S. Patent Application Publication No. US 2004/0020830 (hereinafter "Nierop"). In particular, the Examiner stated that Nierop teaches a frame for separating excavated material having a base with a front wall, two side walls and two horizontal side bars extending backward from opposite sides of a bottom of the front wall, at least one vertical bar member extending vertically upward from the top of each of the horizontal side bars at an end of the horizontal side bars opposite the front wall, and a grate rigidly secured to and extending from the top of the

vertical bar members to a top of the front wall such that the grate forms less than a ninety degree angle relative to a ground surface.

The Nierop reference was published on February 5, 2004 and has a filing date of July 31, 2002. Applicants' pending patent application is "a continuation of U.S. Patent Application Serial No. 10/227,993 filed August 26, 2002 and entitled "Method and Apparatus for Separating Excavated Material", now issued as U.S. Patent No. 6,863,182, which is a continuation of U.S. Patent Application Serial No. 09/503,283 filed February 14, 2000, now issued as U.S. Patent No. 6,439,393". Accordingly, in that Applicants' invention was not described in an application for patent, published under §122(b) by another filed in the United States before the invention by the Applicants, Nierop cannot anticipate Applicants' claimed invention. Moreover, with further respect to Nierop, Nierop fails to disclose a grate rigidly secured to and extending from the top of the vertical bar members to a top of the front wall in that the grate in Nierop is pivotally mounted to an upper cross bar (20a) by hinges (18).

Claims 22 and 25 stand rejected under 35 U.S.C. §102(b) as being anticipated by Bane, U.S. Patent No. 359,659 (hereafter "Bane"). In particular, the Examiner stated that Bane teaches a frame for separating excavated material comprising a base having a front wall (wall near right of page), two side walls (walls above B) and two horizontal side bars (B) extending backward from opposite sides of a bottom of the front wall, at least one vertical bar member (A) extending vertically upward from a top of each of the horizontal side bars at an end of the horizontal side bars opposite the front wall, and a grate (O) rigidly secured to and extending from the top of the vertical bar members to the top of the front wall such that the grate forms less than a ninety degree angle relative to a ground surface.

Bane generally discloses a grinding mill for crushing and reducing ear-corn, grain, feed, and fertilizers. Further, Bane states that "A shaking-screen O is suspended beneath the table D by hangers o of rubber, leather, chains, or other flexible material. Castings P adjustably connected to a pair of diagonally-arranged corner-posts, have pulleys or guides, over which passes a cord or rope, R, having its ends attached to diagonally-opposite corners of the screen,

said cord being in connection with and operated from the crank g² of the cone-shaft for giving the screen a side-to-side motion.” In that the screen in Bane is a shaking-screen with side-to-side motion, Bane fails to disclose a grate that is rigidly secured to, and extending from, a top of the vertical bar members as required by Applicants’ claims. Accordingly, in that Bane fails to disclose each and every element of Applicants’ claimed invention, Bane cannot anticipate Applicants’ claimed invention.

C. The Examiner Has Not Established a *Prima Facie* Case of Obviousness

The Examiner has the initial burden to establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, the Examiner must establish that: (1) the prior art reference (or the references when combined) teaches or suggests all the elements of Appellant’s claims; and (2) there is some suggestion, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine or modify the references. In the present case, with respect to claims 23 and 26, the Examiner has failed to establish that the Nierop and Wall references recite all of the claim elements and in particular, a grate rigidly secured to and extending from the top of the vertical bar members to a top of the front wall. Moreover, there is no suggestion in any of the prior art references cited by the Examiner (or elsewhere in the prior art) to combine or modify the references to achieve Appellant’s claims. Thus, the Examiner has failed to establish a *prima facie* case of obviousness for claims 23 and 26.

The Examiner has the initial burden to establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, the Examiner must establish that: (1) the prior art reference (or the references when combined) teaches or suggests all the elements of Appellant’s claims; and (2) there is some suggestion, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine or modify the references. In the present case, the Examiner has failed to establish that the various combinations of the references recite all of the claim elements. Moreover, there is no suggestion in any of the references (or elsewhere in the prior art) to combine or modify the references to achieve Appellants’ claims.

Thus, the Examiner has failed to establish a *prima facie* case of obviousness for claims 23 and 26.

To establish a *prima facie* case of obviousness, the Examiner must show either how the prior art references suggest, either expressly or impliedly, the combination that results in Appellant's claims or, alternatively, the Examiner must present a convincing line of reasoning as to why one skilled in the art would have found the claims to have been obvious in light of the teachings of the references. Ex parte Clapp, 227 U.S.P.Q. 972, 973 (Bd. of Pat. Appeals and Interferences, 1985). When the motivation to combine the teachings of the prior art references is not immediately apparent, it is the duty of the Examiner to explain why the combination of the teachings is proper. Ex parte Skinner, 2 U.S.P.Q.2d 1788 (Bd. of Pat. Appeals and Interferences, 1986). Significantly, the fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination. In re Mills, 916 F.2d 680 (Fed. Cir., 1990). The teaching or suggestion to make a claimed combination must be found in the prior art and must not be based on Appellant's disclosure. In re Vaeck, 947 Fed.2d 488 (Fed. Cir., 1991).

The test of obviousness is not whether features of a secondary reference may be bodily incorporated into a primary reference's structure, nor whether a claimed invention is expressly suggested in any one or all of the references. Instead, the test is what the combined teachings of references would have suggested to those of ordinary skill in the art. In re Keller, Terry, and Davies, 208 U.S.P.Q. 871, 881 (C.C.P.A., 1981). The mere fact that the prior art may be modified to reflect features of the claimed invention does not make the modification, and hence the claimed invention, obvious unless the desirability of such a modification is suggested by the prior art. The claimed invention cannot be used as an instruction manual or "template" to piece together teachings of the prior art so that the claimed invention is rendered obvious. In re Fritsch, 23 U.S.P.Q.2d 1780, 1783-84 (C.A.F.C., 1992).

The Examiner stated that Nierop teaches all that is claimed by the Applicant except for expressly teaching at least one support bar extending from the top of each of the horizontal side walls to a mid-length of the grate on opposite sides of the grate. The Examiner further states that

Wall teaches a support structure for a screen that uses this type of support (Figure 1, to support b4). Therefore, the Examiner stated that it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention as taught by Nierop to achieve additional support for the grate.

The mere fact that prior art may be modified to reflect the features of the claimed invention does not make the modification, and hence the claimed invention, obvious unless the desirability of such a modification is suggested by the prior art. The claimed invention cannot be used as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. In re Fritsch, 23 U.S.P.Q.2d 1780, 1783-84 (C.A.F.C., 1992). In further support of the non-obviousness of Appellant's patent claims, it has been held that combination patents are not obvious despite a showing that each element of such patents have been previously demonstrated in the prior art. (See, e.g., U.S. Phillips Corp. v. National Micrometrics, Inc., 550 F.2d 716, 723-34, 193 U.S.P.Q. 65 (2d Cir., 1977), *cert. denied*, 434 U.S. 859 (1977); S. C. Johnson & Son, Inc. v. Carter-Wallace, Inc., 614 F.Supp. 1278, 1301, 225 U.S.P.Q. 1022 (S.D.N.Y., 1985), *vacated in part on other grounds*, 781 F.2d 198, 228 U.S.P.Q. 367 (Fed. Cir., 1986).

Further, Appellant asserts that if a combination of references and substitutions of various components of those references were obvious, as argued by the Examiner, then those skilled in the art surely would have implemented them. Due to the long-felt need for a method and apparatus for separating excavated material, combined with the fact that Appellant's claimed method and apparatus has not previously been contemplated or disclosed, indicates that Appellant's claimed method and apparatus are not obvious.

In addition, Nierop fails to qualify as prior art in that Applicants' claimed invention was invented long before Nierop's published patent application. In addition, Wall also fails to teach each and every element of Applicants' claimed invention, and in particular, a grate rigidly secured to, and extending from, a top of vertical bar members as previously set out in Applicants' claims. Accordingly, Applicants claims 23 and 26 cannot be obvious in light of Nierop and Wall.


As mentioned above, the Examiner has the initial burden of factually supporting a *prima facie* case of obviousness. This has not been done. Additionally, the Examiner must prove his case by a preponderance of the evidence, with due consideration to the persuasiveness of any arguments in rebuttal. In re Attacher, 977 F.2d 1443 (Fed. Cir., 1992). When the motivation to combine the teachings of the prior art references is not immediately apparent, it is the duty of the Examiner to explain why the combination of the teachings is proper. Ex parte Skinner, 2 U.S.P.Q.2d 1788 (Bd. of Pat. Appeals and Interferences, 1986). Moreover, the fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination and/or modification. In re Novo, 916 F.2d 680 (Fed. Cir., 1990). Furthermore, the Examiner cannot suggest the combination or modification based on hindsight reconstruction.

VIII. CONCLUSION

For the above reasons, Claims 22-27 fully comply with 35 U.S.C. § 112 and are not anticipated by or obvious to one skilled in the art having knowledge of the Nierop, Bane and Wall references. Accordingly, Appellant respectfully submits that Claims 22-27 are patentable over the prior art and respectfully requests this Board to so indicate.

Dated: March 19, 2007

Respectfully submitted,

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IX. CLAIMS APPENDIX

22. A frame for separating excavated material comprising:
a base having a front wall and two horizontal side bars extending backward from opposite sides of a bottom of said front wall;
at least one vertical bar member extending vertically upward from a top of each of said horizontal side bars at an end of said horizontal side bars opposite said front wall; and
a grate rigidly secured to, and extending from, a top of said vertical bar members to a top of said front wall such that said grate forms less than a ninety degree angle relative to a ground surface.

23. The frame of claim 22 further comprising at least one support bar extending from a top of each of said horizontal side bars to a mid-length of said grate on opposite sides of said grate.

24. The frame of claim 22 further comprising at least one flange extending downward from a bottom of said grate for facilitating engagement with a bucket of a loader/backhoe.

25. A frame for separating excavated material comprising:
a base having a front wall and two side walls;
at least one bar member extending vertically upward from each of said side walls;
and
a grate rigidly secured to, and extending from, a top of said bar members to a top of said front wall such that said grate forms less than a ninety degree angle relative to a ground surface.

26. The frame of claim 26 further comprising at least one support bar extending from a top of each side wall to a mid-length of said grate on opposite sides of said grate.

27. The frame of claim 26 further comprising at least one flange extending downward from a bottom of said grate for facilitating engagement with a bucket of a loader/backhoe.

X. EVIDENCE APPENDIX

None

XI. RELATED PROCEEDINGS APPENDIX

None